

REMARKS

In response to the Office Action dated December 27, 2007, claim 1 has been amended, and new claims 48-52 have been added. No new matter has been added. Reexamination and reconsideration of the claims is respectfully requested.

New independent claim 48 is identical in scope to claim 2 as originally filed, but with a claiming style that is compatible with typical U.S. practice. There is support for this new claim 48 in, for example, originally filed claims 1 and 2. Because each element in claim 48 appeared in the claims as filed, there is no need for the Examiner to perform a new search. In addition, no new matter is entered into the application from new claim 48.

Furthermore, new claims 49-52, which depend from new independent claim 48, are also supported in the specification. The elements in new claims 49-52 are found in originally filed claims 5-8, so there is no need for the Examiner to perform a new search. In addition, no new matter is entered into the application from new claims 49-52.

Claim Objections – 35 U.S.C. § 132

On page 3 of the Office Action, claim 1 is objected to under 35 U.S.C. § 132 as introducing new matter into the disclosure of the invention. Specifically, the Examiner objects to the phrase, “gradually varying a UV radiation dose per treatment generated by a laser from the first skin area to the second skin area.”

Although the Applicant respectfully disagrees with this objection, the Applicant has amended claim 1 to replace the phrase “gradually varying” with the phrase “varying in increments”. There is no change in the scope of claim 1 from this amendment; both expressions mean that the radiation dose may not only be varied between two values (zero and full) but may take on many values between zero and full. For example, on page 5 of the application, lines 15-16 say that the radiation dose can be varied between

100 and 6000 mJ/cm² in increments of 50 mJ/cm². This shows that the radiation dose can be 100, 150, 200, 250, ..., 6000 mJ/cm². Accordingly, there is support in the application for this amendment. It is believed that all claims comply with 35 U.S.C. §132.

Claim Rejections – 35 U.S.C. § 112

On page 4 of the Office Action, claims 68-94 are rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement.

Applicant asserts that this rejection is made erroneously, since the present application includes only 47 claims. At no point during prosecution have there been any claims numbered 68-94. Applicant requests that this rejection of claims 68-94 be withdrawn, along with written notification indicating as such.

On page 4 of the Office Action, claims 1, 2, 3-8, 10, 11 and 14 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Specifically, the Examiner cites the phrase, “gradually varying a UV radiation dose per treatment generated by a laser from the first skin area to the second skin area” as lacking antecedent basis in the originally filed disclosure.

Although the Applicant respectfully disagrees with this rejection, the Applicant has amended claim 1 to replace the phrase “gradually varying” with the phrase “varying in increments”. There is no change in the scope of claim 1 from this amendment; both expressions mean that the radiation dose may not only be varied between two values (zero and full) but may take on many values between zero and full. For example, on page 5 of the application, lines 15-16 say that the radiation dose can be varied between 100 and 6000 mJ/cm² in increments of 50 mJ/cm². This shows that the radiation dose can be 100, 150, 200, 250, ..., 6000 mJ/cm². Accordingly, there is support in the

application for this amendment. It is believed that all claims comply with 35 U.S.C. §112.

Claim Rejections – 35 U.S.C. § 103

On page 4 of the Office Action, claims 1, 2, 4-7, 11 and 14 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Anderson, et al. in combination with Chernoff, Sator, et al. and Neigut; on page 5, Claims 8 and 10 are rejected as being unpatentable over Anderson, et al. in combination with Chernoff, Sator, et al. and Neigut as applied to claims 1, 2, 4-7, 11 and 14; and on page 6, claim 3 is rejected as being unpatentable over Anderson, et al. in combination with Chernoff, Sator, et al. and Neigut as applied to claims 1, 2, 4-7, 11 and 14 and further in combination with Bonis, et al.

Applicant asserts that in the present application, the UV radiation dose is varied depending on the measured epidermis thicknesses while determining a laser radiation dose that causes a visible redness without blister formation in a certain skin area. These measurements are performed in order to establish a correlation between epidermis thickness and maximum laser radiation dose.

On the other hand, it is important that the laser radiation dose is varied individually for each affected skin area depending on the epidermis thickness. Therefore, new independent claim 48 has been added, which explicitly makes clear that the UV radiation dose is varied per treatment, not the cumulative radiation dose of several treatments. Moreover, the thickness of the epidermis is measured with the help of an ultrasonic device (originally disclosed in claim 5). Anderson merely mentions the measurement of skin thickness via optical profilometry.

Applicant asserts that Anderson just differentiates between skin affected by the skin disorder and skin that is not affected by the skin disorder. Therefore, areas affected by psoriasis receive a full therapeutic dose while skin areas not affected receive no therapeutic dose at all. In other words, there is no variation between psoriasis areas in

dependence on the epidermis thickness. Measurement of skin thickness is only mentioned as one of several methods of differentiation between affected skin and non-affected skin.

However, according to the present application, therapy is much more effective if those skin areas affected by psoriasis with a high skin thickness receive a larger radiation dose than those skin areas affected by psoriasis having a low skin thickness. In contrast to Anderson, the laser radiation dose of the present application is individually regulated or varied for each affected skin area depending on the measured epidermis thickness.

According to col. 15, lines 6-48, of Anderson, at first a "treatment map" is prepared. This treatment map merely shows which areas are affected by psoriasis and which areas are not affected by psoriasis but does not differentiate between affected areas. Line 40 clearly states that therapeutic doses are delivered to subsequent areas until the system notices that a certain area is a non-affected area. The shutter remains completely open for all affected areas. There is no variation of the radiation dose for affected areas in Anderson.

Col. 15, line 52 of Anderson merely states that the fluence of the therapeutic dose can be varied according to differences of the diagnostic ratios from the threshold values, however, not in view of the measured epidermis thickness. Clearly, there is no individual variation of the radiation dose for each affected skin area in order to treat every affected skin area with the ideal dose.

With respect to page 3 of the Office Action, it is unclear as to why the Examiner believes that after treatment of a certain skin area immediate subsequent diagnosis is carried out. In view of the fact that the effect of the treatment cannot be seen immediately after the treatment since healing does not take place within seconds but takes some time, an immediate subsequent diagnosis would make no sense and, moreover, not show any difference to a diagnosis before the treatment. There is no hint by Anderson to treat every affected skin area individually with a particular radiation dose that is adapted individually in

view of the epidermis thickness measured by an ultrasonic device, as in the present application.

For all the reason stated herein, Applicant asserts that Anderson teaches away from amended independent claim 1. Therefore, no combination of Anderson with any other references may render claim 1 obvious.

Three criteria must be met to establish a prima facie case of obviousness. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference. Second, there must be a reasonable expectation of success. Finally, the prior art reference, or combination of references, must teach or suggest all the claim limitations. MPEP § 2142. Applicant respectfully traverses the rejection since the prior art fails to disclose all the claim limitations and there would be no motivation to combine the references as proposed by the Examiner. Applicant believes that amended independent claim 1 and new independent claim 48 are in condition for allowance. Reconsideration, allowance, and notice to that effect are respectfully requested.

Dependent claims 2-8, 10, 11 and 14, which are dependent from amended independent claim 1, were also rejected under 35 U.S.C. §103(a) as being unpatentable over Anderson in combination with a variety of references. While Applicant does not agree with the particular rejections to these dependent claims, it is believed that these rejections are moot in view of the remarks made in connection with amended independent claim 1. These dependent claims include all of the limitations of the base claim and any intervening claims, and recite additional features which further distinguish these claims from the cited references. Therefore, dependent claims 2-8, 10, 11 and 14 are also in condition for allowance. Reconsideration, allowance, and notice to that effect are respectfully requested.

CONCLUSION


In view of the amendments and reasons provided above, it is believed that all pending claims are in condition for allowance. The amendments clarify the patentable invention without adding new subject matter. Applicant respectfully requests favorable reconsideration and early allowance of all pending claims.

If a telephone conference would be helpful in resolving any issues concerning this communication, please contact Applicant's attorney of record, Michael B. Lasky at (612) 436-3152.

Respectfully submitted,

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